## Claims

- A fuel cell assembly comprising:

   a membrane electrode assembly;
   a bipolar separator plate; and
   independently-acting compliant electrical contacts disposed between said membrane electrode assembly and said bipolar separator plate.
- 2. A fuel cell stack, comprised of a first assembly according to claim 1 and a second assembly according to claim 1, wherein the independently-acting compliant electrical contacts of said first assembly are in electrical contact with the membrane electrode assembly of said second assembly.
- 3. The fuel cell assembly according to claim 1 wherein said independently-acting compliant electrical contacts comprises springs.
- 4. The fuel cell assembly according to claim 1, wherein said springs are inverted-V shaped.
- 5. The fuel cell assembly according to claim 1, wherein said springs are S-shaped.
- 6. The fuel cell assembly according to claim 1, wherein said springs are Z-shaped.
- 7. The fuel cell assembly according to claim 1, wherein said springs are omegashaped, wherein said omega-shaped springs have a height and a tapered middle section, said tapered middle section having a width, and wherein said width is at least 50% as great as said height.
- 8. The fuel cell assembly according to claim 1, wherein said independently-acting compliant electrical contacts are formed into an array having a length, wherein said membrane electrode assembly has a length, and wherein said length of said array is approximately equal to said length of said membrane electrode assembly.
- 9. The fuel cell assembly according to claim 1 wherein said independently-acting compliant electrical contacts are formed into an array having a width, wherein said membrane electrode assembly has a width, and wherein said width of said array is approximately equal to said width of said membrane electrode assembly.
- 10. The fuel cell assembly according to claim 8 wherein said independently-acting compliant electrical contacts are formed into an array having a width, wherein said membrane electrode assembly has a width, and wherein said width of said array is approximately equal to said width of said membrane electrode assembly.





- 12. Independently-acting compliant electrical contacts for maintaining electrical contact between a bipolar separator plate and a membrane electrode assembly in a fuel cell stack.
- 13. The independently-acting compliant electrical contacts according to claim 12, wherein said independently-acting compliant electrical contacts comprise springs.
- 14. A method for maintaining electrical contact between a bipolar separator plate and a membrane electrode assembly in a fuel cell stack comprising placing independently-acting compliant electrical contacts between said bipolar separator plate and said membrane electrode assembly.
- 16. A fuel cell assembly comprising:

  a membrane electrode assembly;
  a bipolar separator plate; and
  flexible electrical contact members disposed between said membrane electrode assembly and said bipolar separator plate.
- 17. The fuel cell assembly according to claim 16, wherein said flexible electrical contact members comprise a plurality of springs, whereby said springs maintain independently-acting compliant electrical contact between said membrane electrode assembly and said bipolar separator plate.
- 19. A fuel cell stack, comprised of a first assembly according to claim 18 and a second assembly according to claim 18, wherein the independently-acting compliant electrical contacts of said first assembly are in electrical contact with the membrane electrode assembly of said second assembly.

21. A fuel cell assembly comprising:

a membrane electrode assembly;
a bipolar separator plate;
first means for maintaining electrical contact between said membrane electrode assembly and said bipolar separator plate; and second means for sealing said membrane electrode assembly with said bipolar separator plate, wherein said second means functions independently from said first means.